

## CLAIMS

1. A game system performing image generation, comprising:

5                   intermediate    buffer    drawing    means    which  
temporarily    draws    an    image    of    a    geometry-processed  
object    in    an    intermediate    buffer    in    place    of    drawing    the  
image    in    a    frame    buffer;    and

frame buffer drawing means for drawing the image  
10 of the geometry-processed object drawn in the  
intermediate buffer from the intermediate buffer into  
the frame buffer.

## 2. The game system according to claim 1,

15 wherein into the frame buffer, the frame buffer  
drawing means draws a primitive surface of which drawing  
positions is specified based on three-dimensional  
information of the object and on which the image of the  
geometry-processed object drawn in the intermediate  
20 buffer is texture-mapped.

3. The game system according to claim 2,  
wherein when a plurality of primitive surfaces  
corresponding to a plurality of objects are to be drawn  
25 into the frame buffer, the frame buffer drawing means  
performs hidden-surface removal between the primitive  
surfaces based on the depth values of the respective

primitive surfaces.

4. The game system according to claim 2,

wherein the frame buffer drawing means draws a  
5 plurality of primitive surfaces of which drawing  
positions are specified based on the three-dimensional  
information of one object into the frame buffer, and  
makes images texture-mapped over the plurality of  
primitive surfaces different from one another.

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5. The game system according to claim 1, further  
comprising means for performing a given image effect  
processing on the image on the intermediate buffer before  
the image drawn in the intermediate buffer is drawn in  
15 the frame buffer.

6. The game system according to claim 1, further  
comprising means for synthesizing an image drawn in the  
intermediate buffer at a present frame with another image  
20 drawn in the intermediate buffer at a past frame before  
the image drawn in the intermediate buffer is drawn in  
the frame buffer.

7. The game system according to claim 1, further  
25 comprising means for synthesizing an image drawn in the  
intermediate buffer with another image drawn in the frame  
buffer before the image drawn in the intermediate buffer

is drawn in the frame buffer.

8. The game system according to claim 1,

wherein the intermediate buffer drawing means  
5 draws the image of the geometry-processed object in the  
intermediate buffer for each discrete frame.

9. The game system according to claim 8,

wherein when the images of plural geometry-  
10 processed objects are drawn in the intermediate buffer,  
the intermediate buffer drawing means draws an image of  
the K-th object in the intermediate buffer at the N-  
th frame and draws an image of the L-th object in the  
intermediate buffer at the (N+1)-th frame without  
15 drawing the image of the K-th object in the intermediate  
buffer.

10. A computer-usable program embodied on an  
information storage medium or in a carrier wave, the  
20 program comprising a processing routine for a computer  
to realize:

intermediate buffer drawing means which  
temporarily draws an image of a geometry-processed  
object in an intermediate buffer in place of drawing the  
25 image in a frame buffer; and

frame buffer drawing means for drawing the image  
of the geometry-processed object drawn in the

intermediate buffer from the intermediate buffer into the frame buffer.

11. The program according to claim 10,  
5 wherein into the frame buffer, the frame buffer  
drawing means draws a primitive surface of which drawing  
positions is specified based on three-dimensional  
information of the object and on which the image of the  
geometry-processed object drawn in the intermediate  
10 buffer is texture-mapped.

12. The program according to claim 11,  
wherein when a plurality of primitive surfaces  
corresponding to a plurality of objects are to be drawn  
15 into the frame buffer, the frame buffer drawing means  
performs hidden-surface removal between the primitive  
surfaces based on the depth values of the respective  
primitive surfaces.

20 13. The program according to claim 11,  
wherein the frame buffer drawing means draws a  
plurality of primitive surfaces of which drawing  
positions are specified based on the three-dimensional  
information of one object into the frame buffer, and  
25 makes images texture-mapped over the plurality of  
primitive surfaces different from one another.

14. The program according to claim 10, further comprising a processing routine for a computer to realize means for performing a given image effect processing on the image on the intermediate buffer before the image 5 drawn in the intermediate buffer is drawn in the frame buffer.

15. The program according to claim 10, further comprising a processing routine for a computer to realize 10 means for synthesizing an image drawn in the intermediate buffer at a present frame with another image drawn in the intermediate buffer at a past frame before the image drawn in the intermediate buffer is drawn in the frame buffer.

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16. The program according to claim 10, further comprising a processing routine for a computer to realize means for synthesizing an image drawn in the intermediate buffer with another image drawn in the frame buffer 20 before the image drawn in the intermediate buffer is drawn in the frame buffer.

17. The program according to claim 10,  
wherein the intermediate buffer drawing means  
25 draws the image of the geometry-processed object in the intermediate buffer for each discrete frame.

18. The program according to claim 17,  
wherein when the images of plural geometry-  
processed objects are drawn in the intermediate buffer,  
the intermediate buffer drawing means draws an image of  
5 the K-th object in the intermediate buffer at the N-  
th frame and draws an image of the L-th object in the  
intermediate buffer at the (N+1)-th frame without  
drawing the image of the K-th object in the intermediate  
buffer.

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19. An image generation method for generating an image,  
comprising steps of:

temporarily drawing an image of a geometry-  
processed object in an intermediate buffer in place of  
15 drawing the image in a frame buffer; and

drawing the image of the geometry-processed object  
drawn in the intermediate buffer from the intermediate  
buffer into the frame buffer.

20 20. The image generation method according to claim 19,  
wherein a primitive surface, of which drawing  
positions is specified based on three-dimensional  
information of the object and on which the image of the  
geometry-processed object drawn in the intermediate  
25 buffer is texture-mapped, is drawn into the frame buffer.

21. The image generation method according to claim 20,

wherein when a plurality of primitive surfaces corresponding to a plurality of objects are to be drawn into the frame buffer, hidden-surface removal between the primitive surfaces is performed based on the depth values of the respective primitive surfaces.

22. The image generation method according to claim 20,  
wherein a plurality of primitive surfaces of which  
drawing positions are specified based on the three-  
10 dimensional information of one object are drawn into the  
frame buffer, and images texture-mapped over the  
plurality of primitive surfaces are different from one  
another.

15 23. The image generation method according to claim 19,  
wherein a given image effect processing on the  
image on the intermediate buffer is performed before the  
image drawn in the intermediate buffer is drawn in the  
frame buffer.

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24. The image generation method according to claim 19,  
wherein an image drawn in the intermediate buffer  
at a present frame is synthesized with another image  
drawn in the intermediate buffer at a past frame before  
25 the image drawn in the intermediate buffer is drawn in  
the frame buffer.

25. The image generation method according to claim 19,  
wherein an image drawn in the intermediate buffer  
is synthesized with another image drawn in the frame  
buffer before the image drawn in the intermediate buffer  
5 is drawn in the frame buffer.

26. The image generation method according to claim 19,  
wherein the image of the geometry-processed object  
in the intermediate buffer is drawn for each discrete  
10 frame.

27. The image generation method according to claim 26  
wherein when the images of plural geometry-  
processed objects are drawn in the intermediate buffer,  
15 an image of the K-th object in the intermediate buffer  
is drawn at the N-th frame and an image of the L-th object  
in the intermediate buffer is drawn at the (N+1)-th frame  
without drawing the image of the K-th object in the  
intermediate buffer.